

Slide 1

FAA Commercial Aviation  
Forecast Conference

Washington, 13-14 March 2001

**EUROPEAN ATC MODERNISATION**

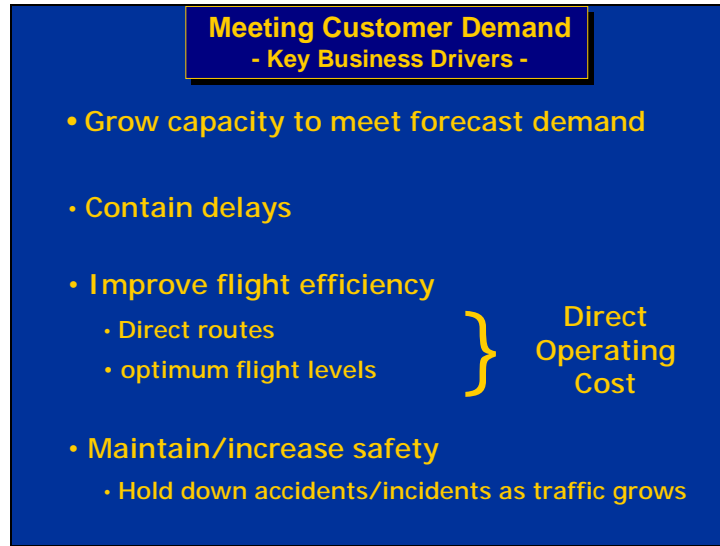
George PAULSON

Director

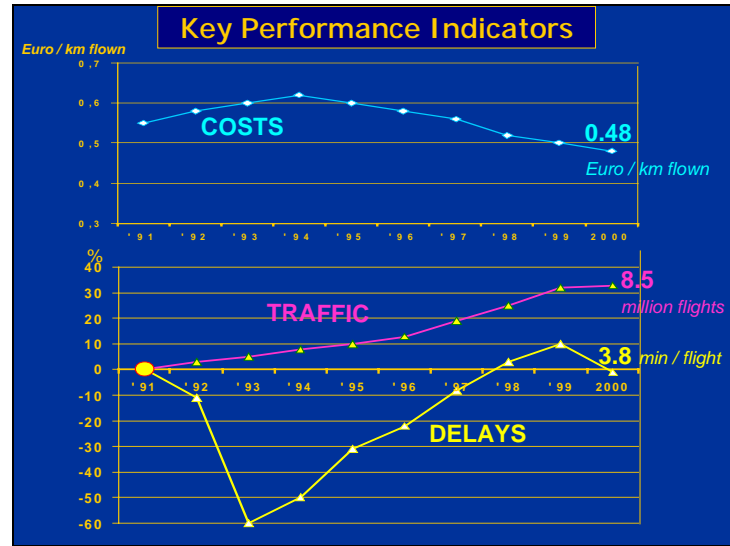
Safety, Airspace, Airports & Information Services

EUROCONTROL

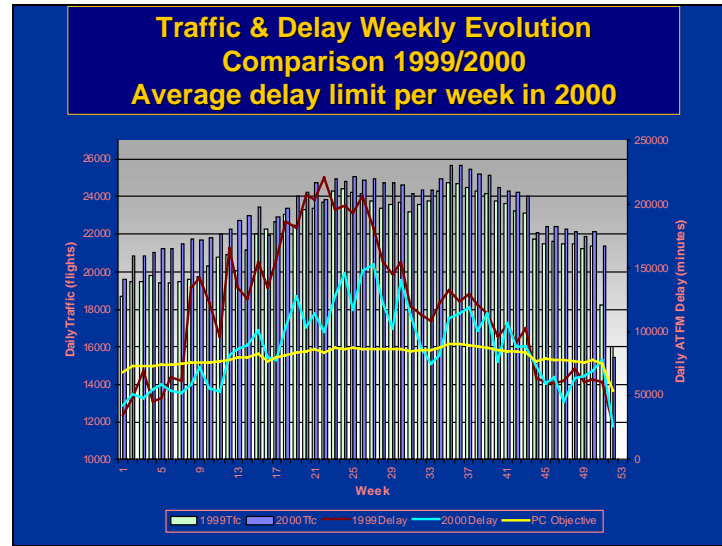
## Slide 2



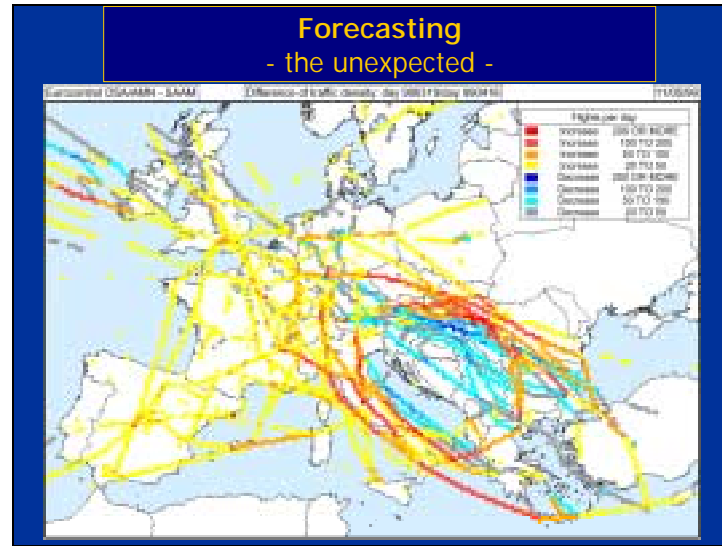
Slide 3

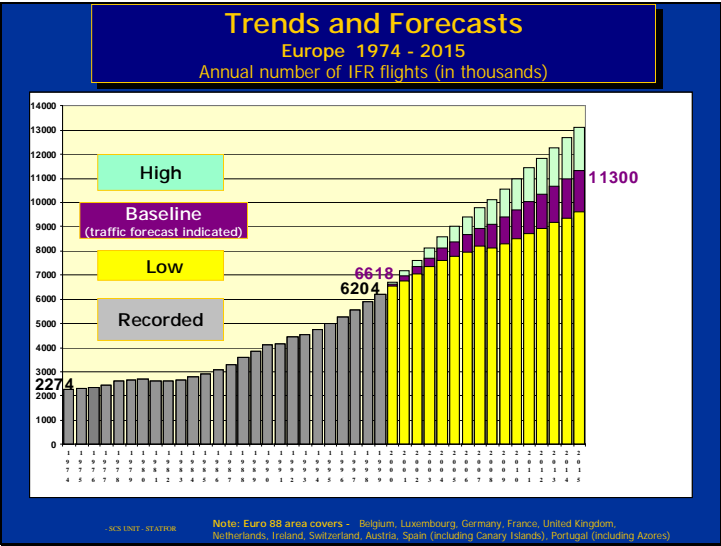


Slide 4

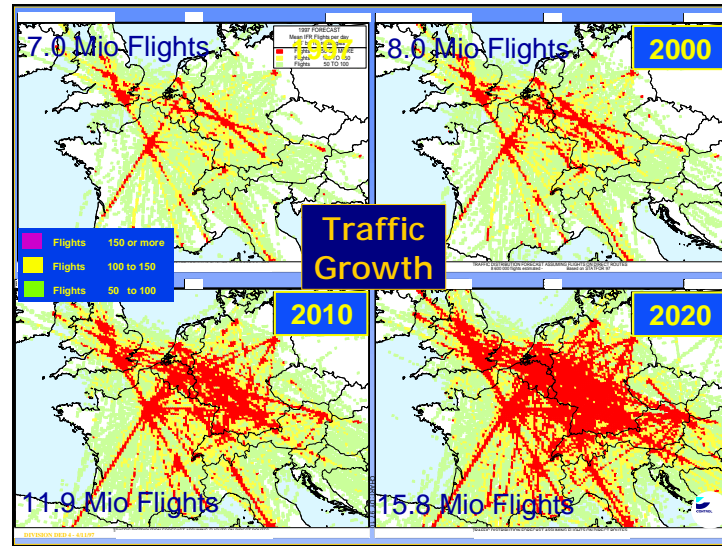


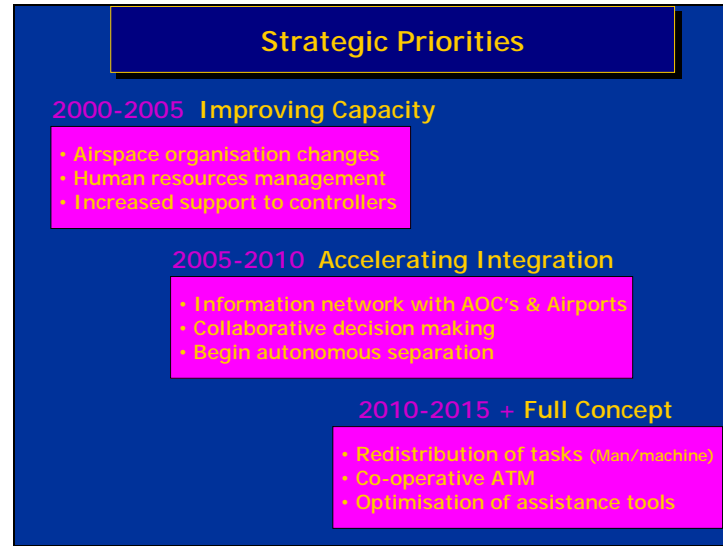
Slide 5





Slide 7



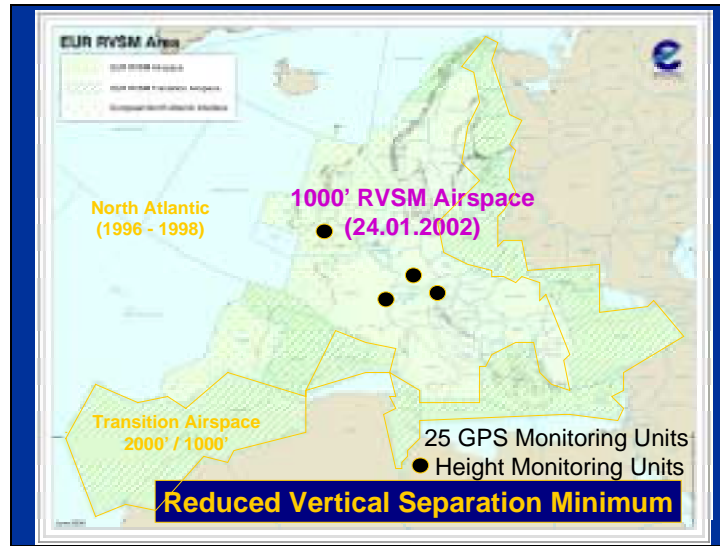




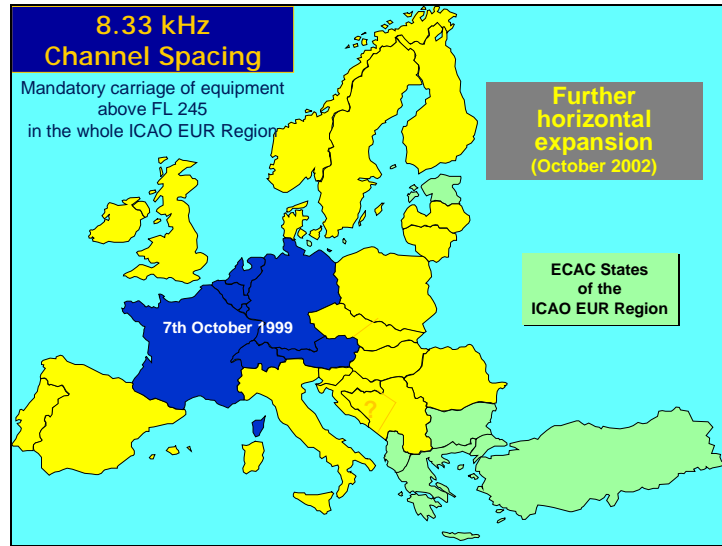
### European ATC Modernisation Programmes

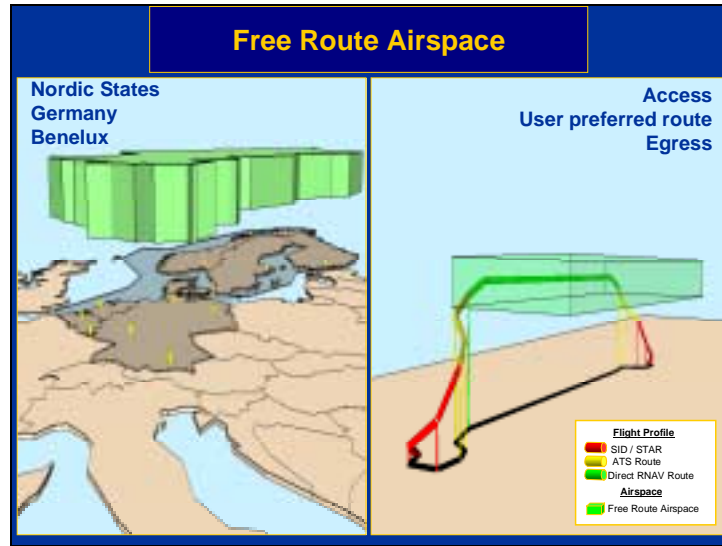
- **Route Network Development** : on-going
- **Improved flow management** : 2001 - 2002
- **RVSM implementation** : 2002
- **8.33 kHz expansion** : 2001 - 2002
- **Free Route Airspace** : from 2003
- **Controller - Pilot Data Link** : from 2003
- **Satellite Navigation** : from 2004
- **Central European Air Traffic Control Centre & Services** : from 2007

## Slide 10

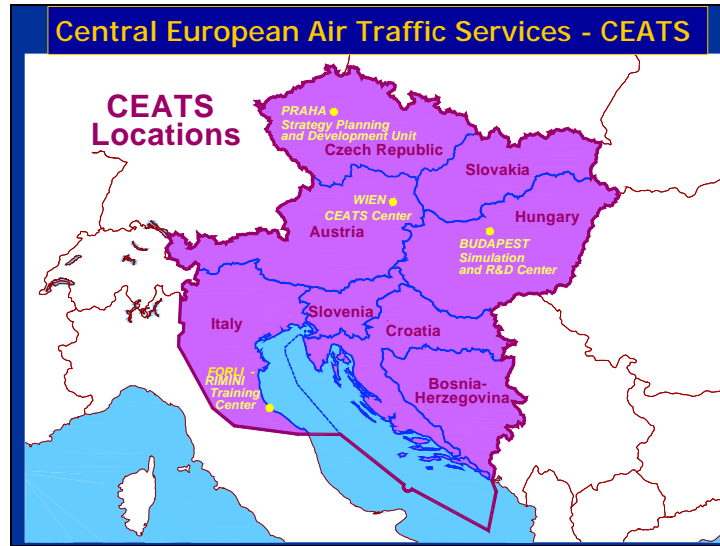


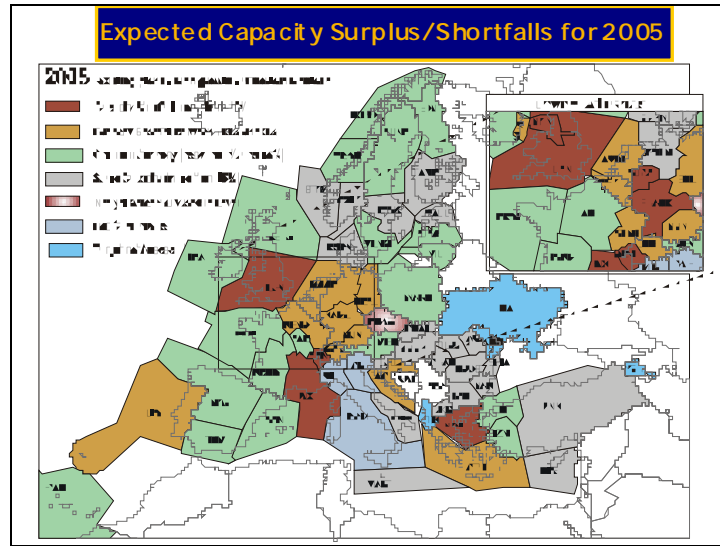
Slide 11









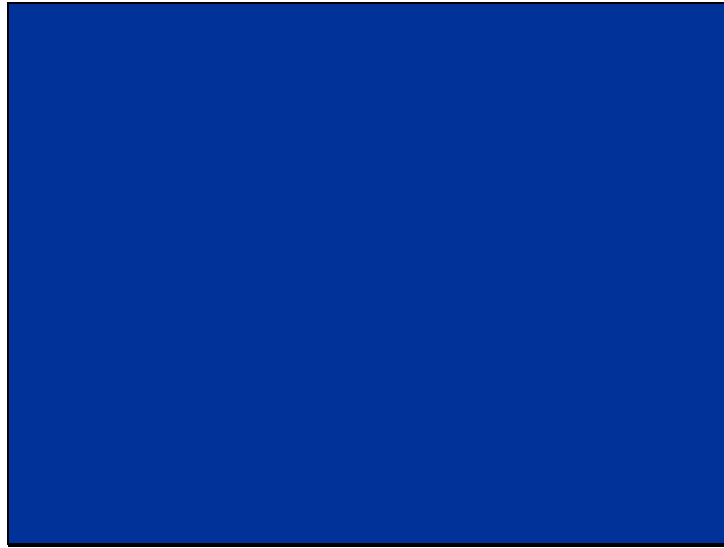


### European ATC Modernisation - The Prognosis -

- **SAFETY MANAGEMENT**
  - clear split from regulation
  - meet European regulatory requirements
- **ATC MODERNISATION**
  - Implement ATM2000+ Strategy
  - European & National Programmes
- **PERFORMANCE-BASED CAPACITY PLANNING**
  - 2001 en-route delay KPI 2.8 mins
  - Capacity boosts at key ACCs
  - Delays contained to 2006



Slide 17



FAA Commercial Aviation Forecast Conference

## European ATC Modernisation

Forecasts, strategies and plans

Modernising European ATC

**Measuring the improvement**

Enhancing Safety

Prognosis

### Enhancing Capacity

- Measure and manage
- Increase controller numbers
- Improve airspace structure
- Improve civil/military co-operation
- Introduce new ATM system components

FAA Commercial Aviation Forecast Conference

## European ATC Modernisation

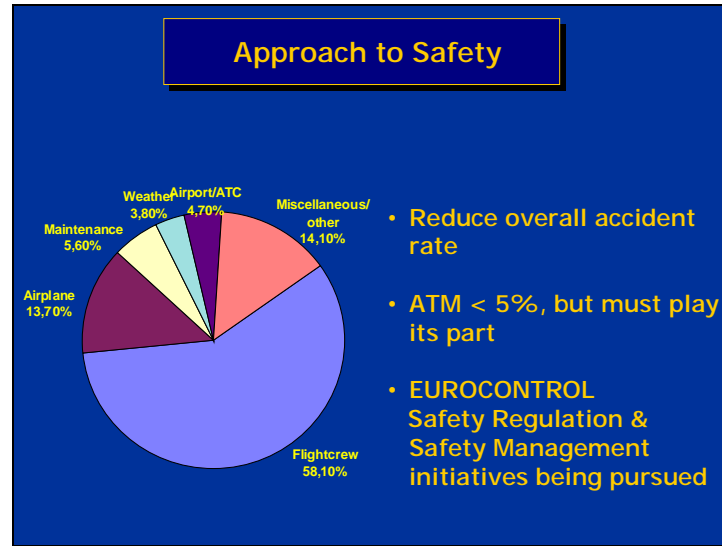
Forecasts, strategies and plans

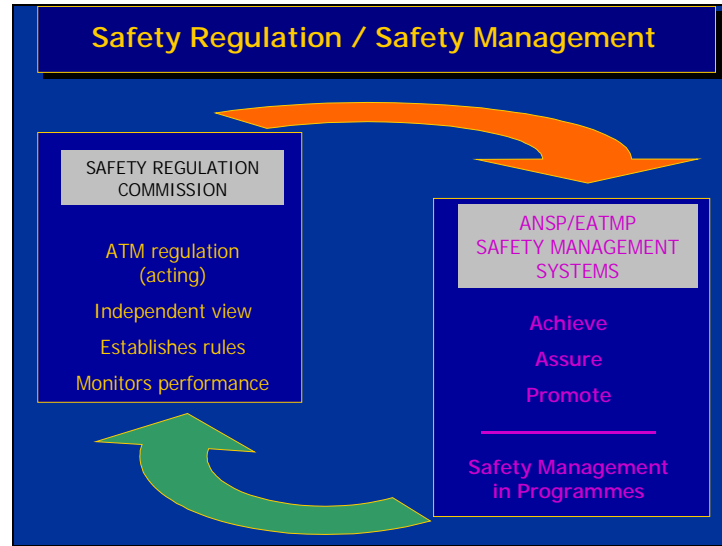
Modernising European ATC

Measuring the improvement

**Enhancing Safety**

Prognosis





**ESARR**  
**- EUROCONTROL Safety Regulatory Requirements -**

**Reporting and Assessment of Safety Occurrences in ATM**  
ESARR2 - Effective 1 Jan. 2000

**Use of Safety Management Systems by ATS Service Providers**  
ESARR3- Approved July 2000, Effective July 2003

**Risk Assessment and Mitigation in ATM**  
ESARR4 - Approval expected April 2001

**ATM Services' Personnel**  
ESARR5 - Approved Nov. 2000, Effective Nov. 2003

**Software in CNS/ATM Systems**  
ESARR6 - Working Draft

FAA Commercial Aviation Forecast Conference

## European ATC Modernisation

Forecasts, strategies and plans

Modernising European ATC

Measuring the improvement

Enhancing Safety

**Prognosis**



## EUROCONTROL - Core Business -

Management of the European Air Traffic Management Programme (EATMP)

Operation of a Central Flow Management Unit (CFMU)

Simulation and R&D centre

Collection of Route Charges (c. €5 billion in FY2000)

Management of an international (4 States) Air Traffic Control Centre

Development of an international (8 States) Air Traffic Control Centre

Provision of education, training and transfer of knowledge

FAA Commercial Aviation Forecast Conference

## European ATC Modernisation

### Forecasts, strategies and plans

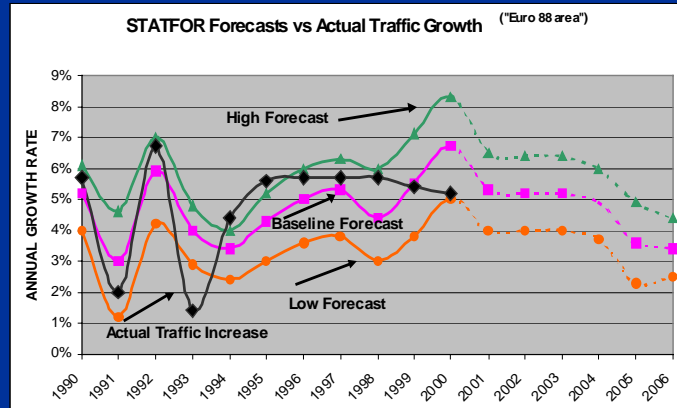
Modernising European ATC

Measuring the improvement

Enhancing Safety

Prognosis

## Forecast v. Outturn





## Key Areas for Pan-European Improvement

- **Airspace Management**
  - re-organised airspace
  - more flight levels
  - co-operation with military
  - improved flows
- **Human Resources**
  - increased recruitment
  - better deployment
- **Systems**
  - Communications, Navigation, Surveillance
  - Air Traffic Control Centres
- **Constraints to Growth**
  - Airports
  - Environment

FAA Commercial Aviation Forecast Conference

## European ATC Modernisation

Forecasts, strategies and plans

**Modernising European ATC**

Measuring the improvement

Enhancing Safety

Prognosis

